



LEAF AREA METER

MODEL NO. - ACM-52301-J



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Weiber **leaf area meter** is compact, accurate tabletop instrument to check area of leaf. The operation is very easy, even a layman can operate. This instrument can also be used to check area of non-transparent flat surface material like cloth/paper/plastics/leather etc. This instrument is based on photometric technology

TECHNICAL SPECIFICATIONS

- Measuring Area: set of circular mask plates.
- Light Source: Fluorescent light source.
- Detector: photo sensors with built in area.
- Accuracy: A + .3sqcm for checking small area.
- + 1 sq cm for checking larger area
- Power Requirement: 230v, 50hz., one cvt more than 100 va capacity.
- Price: the cost of one single standard unit with all standard accessories.

FUNCTION

Acm-52301-j leaf area meter can measure area of plant (alive or not alive), abnormality figure quickly, used in

agriculture, forestry, weather.

2. Main technical sheet

To measure area of plant leaf (alive or not alive), abnormality figure

Quickly, used in agriculture, forestry, weather.

Acm-52301-j micro electro

1. Measuring area

500a<500cm² (three range) 0-500cm² 0-300cm² 0-150cm²

2. Error : not exceed + 3% of full scale





3. Display -lcd

4. Distinguish -1cm² min

5. Accumulate memory- 65535cm² max

6. Display memory.

7. Size: 500a: 420x 340x 110 (mm)

8. Measure area:

Area cm² error cm²

0-150 + 5

0-300 + 9

0-500 + 15

9. Weight : 2.7kg

3. Frame

Measuring board zero adjust sketchy display battery

board back button. Full scale choice memory button zero

button measurement button memory display.

(z) (m) Power switch zero adjust inching press board

HOW TO USE?

A. Lamp-house and standard frame choice

Open the case, select the correct uniformity lamp-house

(example the outside Dispersion lamp), require the illumination of the bright side is same (the illumination Min is zero), The max can clear the "lobat 1999" on the display, if can't clear should weaken the illumination)

B. Press the power switch

It display (the tolerant is 5000 standard board, unit is cm²

Memory is zero), press the zero button, the instrument

display the stochastic number. Adjust the zero adjust screw,

sketchy first then adjust the inching, let it display 000, put. The

standard board on the measure board, if according to the

error require, let the Object on the measuring board, cover

the press board, them measure the area.

C. Standard board sum the result

If the object area is bigger than the measure board, we can divide into small part, then Sum the result.

For example, the first area is 210cm², press the measure button (m) it display "lobat210" Press the memory

button(m+), it display 11 character. Then press the zero button(z), it display. The stochastic number, adjust the zero

button(z), take the object on the measure board, for



Example it display 198cm², press the measure button(m), it display lobat198cm², press the Memory button(m+), then display 11 character, the result memories. If need measure and memory several time, only press the rm button, it can display the memory Button. If it not exceed 999, it will display directly, if exceed 999, it only display two character for Example lobat13, press the rm second time, display 084, so the memory is 13084. If the memory is over 65535, it display 88, it means the memory is overflow, it need press rm. Then can read the result, the result is before the last time measured. If need to measure continue, Should press rst button, clear the memory.

HOW TO USE THE STANDARD BOARD?

- Acm-52301-j default is 500, without standard board, press the zero button,(z) adjust the sketchy
- First then adjust the inching screw, when it display 000 we could measure.
- Press full scale choice button it display 300, take the

- 300 standard board, then take the same
- Processing as above.
- Press full scale choice button for second time, it display 150, take the 150 standard Board.
- Press full scale choice button for third time, it display back to 500.
- Acm-52301-j default is 500, without standard board, press the zero button(z), adjust the sketchy
- First then adjust the inching zero adjust screw, when it display 000 we could measure.
- Press full scale choice button for second time, it display 150, take the 150 standard board.
- Press full scale choice button for third time, it display back to 300
- If need to change the standard, should press the rst button first, and the memory will be cleared.

EUPHOTIC AREA MEASURE

Not euphotic leaf we think the $s_1=s_2$ (s_1 mean the measure result, s_2 mean the real area) if the Leaf



euphotic is too much, $s_1 < s_2$, we need to consult the rate of the euphotic.

How to get rate of the euphotic?

Take the standard board on the measure board, take something clearly cover the object, for example, use the 150 standard board, with cover the clearly thing, the result is 144, if cover with opacity thing the result is 150, so the rate of the euphotic is $\eta = (s-s)/s * 100\%$

H mean the rate of the euphotic

S mean measure area cover with the opacity thing.

S mean the real area

$$S = s * (1 + \eta)$$

For example if measure the leaf $s = 98 \text{cm}^2$

$$H = (100 - 98) / 98 * 100\% = 2.0408\%$$

$$S = 98 * (1 + 2.0408\%) = 99.99 \text{cm}^2$$

Actually the thick of the leaf not as same, so the euphotic rate is not same, we need to measure the rate for every leaf.

ATTENTION

- The instrument work condition in 0--400c
- With the uniformly lamp-house
- Work for one people one instrument
- Need to adjust the zero regularity
- Shutdown the power, if not use it
- It display 000 mean power off, need to change 2x 9v battery
- Repair reason repair
- Not display no battery change battery
- Can not adjust zero too dark take the bright lamp
- Too much error lamp house do not change the lamp house
- Uniformity or not or change the
- Steady going instrument position.



An ISO 9001 : 2208 | ISO 14001 : 2008 | ISO 13485
WHO: GMP Products | GLP Compliant Products

www.acmasindia.com | www.acmasglobal.com | www.test-chambers.com

ACMAS TECHNOLOGIES PVT. LTD.

CORPORATE OFFICE/ SHOWROOM (INDIA)

Plot No. 352-353, Sector – 57
Phase- IV Kundli, Sonapat, Haryana - 131028
Land Line No.: +91 - 11- 47619688,
Fax: +91-11-47619788
E-mail.: info@acmasindia.com

SALES OFFICE (HONG KONG)

Unit D 28 11/F Wing Tat Comm,Bidg 97, Bonham Strand East,
Sheung Wan, Hong Kong (PRC)
Tel.: 0086-13929598046 | 0086- 18922303099
E-mail.: hk@acmasindia.com

SALES OFFICE (RUSSIA)

Inmed Trade Street Ozerkovsky Embankment,
Unit No 50, Straine- 1, Off- 502, Moscow, Russia
E-mail.: info@acmasindia.com
Tel.: 0049- 79592345 | Email: russia@acmasindia.com